



## **DISTRIBUTION CHANNEL STRUCTURE INFLUENCE ON THE PERFORMANCE OF CEMENT MANUFACTURING FIRMS IN KENYA**

**Jairus M. Kitainge,  
Jemaiyo Beatrice**

Catholic University of Eastern Africa,  
P.O. Box 908-30100,  
Kenya

### **Abstract:**

Manufacturing firms need to choose the distribution channel which is effective to ensure their products reach their intended destination on time. This paper looks at how the decision by Kenya's cement manufacturing firms to use a particular distribution channel structure influences their performance. The study targeted seven cement manufacturing firms located in the country. The targeted respondents were; 140 cement distributors, 140 cement customers, 35 cement firms finance directors, 140 sales and distribution department employees and 14 heads of department. A sample size of 216 from the target respondents was selected for this study using stratified sampling method. Data was collected through questionnaires that were designed as per the study theme. Data collected was analysed using both descriptive and inferential statistics with coding and entry of data enabled by use of Statistical Product and Service Solutions. The research result showed that most cement companies in the country had ensured that their channel structures were working and efficiently to serve their customers irrespective of their geographical location. Computed correlation statistics showed that there existed significant strong positive relationship ( $r=0.758$  and  $p=0.001$ ) between distribution channel structure and performance of cement manufacturing firms in Kenya. This means that changes in distribution structures appear to enhance performance of cement production companies. The paper recommends that to improve on distribution channel structure, all cement companies need to ensure that distribution objectives of their organization resonate with marketing and distribution objectives. This will ensure success of distribution process.

**Keywords:** channel, distribution, performance, structure, cement, manufacturing

## 1. Introduction

Distribution is an important component of the production system of a company. Oluwaseun, Surajudeen, Oluwatosin and Danjuma (2014) explained that it consists of an undertaking of distributing products from the source to where the demand is high. This happens through having a well-structured and coordinated distribution channel. Distribution channel is a structured network of institutions and agencies that together do all tasks expected to connect manufacturers with consumers to attain various marketing activities (American Marketing Association, n.d.). In another view, channel of distribution consist of means through which products and services move from the production point (manufacturing) to final users (consumers). They are pathways through which finances, information and products flow (Mulky, 2013). This does not restrict manufacturing firms from connecting with consumers directly; the most preferred method is to follow a distribution channel for their products to reach end users.

In the manufacturing sector, distribution involves the planning and implementation of physical flow of materials and final goods from the point of production to the point of use to meet consumer needs at a profit on the side of the marketer (Gong, Law, Chang & Xin, 2009). Nyalita (2009) noted that channels of distribution function in a dynamic and intricate operating environment. Kenyon and Meixell (2012) noted that effectiveness and efficiency of distribution tasks has a significant influence on performance of business but also how consumers perceives the products and service quality offered by the organisations. If the flows of finished goods to the customer are unreliable, the firm's customer base will be dissatisfied leading to poor performance (Kitainge, Bor & Wanza, 2019). Having a strong distribution and warehousing strategy is critical to your success in today's global environment as a production firm (Li et al, 2005). For companies to succeed, they have to delivery best and quality products to their final end users. Being in a position to meet consumers' preference with regard to products and services assist the company to expand its market size through maintenance of strong association and developing new ones. This paper looks at the extent to which distribution structure affects performance of manufacturing firms in Kenya.

Kahia and Iravo (2014) inform that distribution structure utilised by an institution could have influence on its capacity to succeed. Existence of provincial depots means whether manufacturing organisations have built or leased depots in counties so that they can bring their products near consumers. Regional depots may allow for proper capacity utilization of transport over long distances, as this is not dependent on individual customer orders (Mwikali & Kavale, 2012). When designing distribution structure, certain decisions which are strategic have to be considered. The first one being establishing the suitable agent type like: direct sales force, broker, franchise, retailer or wholesaler. The second decisions to make related with the intensity of the distribution which explains how many liaisons to take in and channel structure number levels (Kitainge et al., 2019). Distribution intensity is a key element of the channel strategies

(Fulmer, Gerhart & Scott, 2003) and often dictates all the channel structure influencing the agents' type, type of distribution (direct or indirect) and market size. Every autonomous channel adds to the collective organisation sales increase, increased satisfaction of customers, reduction of costs and improved loyalty to the organisation products to the market, thus improved productivity. This paper looks at how manufacturing firms in Kenya are utilising distribution structure strategy to enhance their performance in this competitive industry.

## **2. Statement of the Problem**

Cement manufacturing is an important sector in Kenya, and it makes a substantial contribution to the country's economic development (Ngendo, 2013). The Government of Kenya is giving great emphasis to infrastructure development as evidenced by its budget resource allocations to construction of various Vision 2030 flagship projects around the country. These construction projects (private and public) consume a lot of cement products and therefore the existing companies in Kenya have to have effective distribution channel structure strategies to meet the demand and improve performance. Moreover, one of the governments of the day Big four agenda seeks to improve housing conditions for all Kenyans, and this therefore creates demand for cement across private and public sector players in the housing industry. As it is known, design of channel and its management are significant features in a firm's ability to succeed (Mulky, 2013). Some Kenyan cement companies listed in the Nairobi stock exchange have been recording losses over the years. For instance, Athi River Mining Cement Company was put into administration in the year 2015 (it was later sold to Devki group) while East African Portland Cement has been posting losses year in year out for more than 10 years (Kitainge, Bor & Wanza, 2019). The problem amongst these two companies suggests that variability in performance is evident and therefore the key question however is; does distribution channel structure influence performance of cement manufacturing firms in Kenya? A question this paper addresses.

### **2.1 Theoretical Framework**

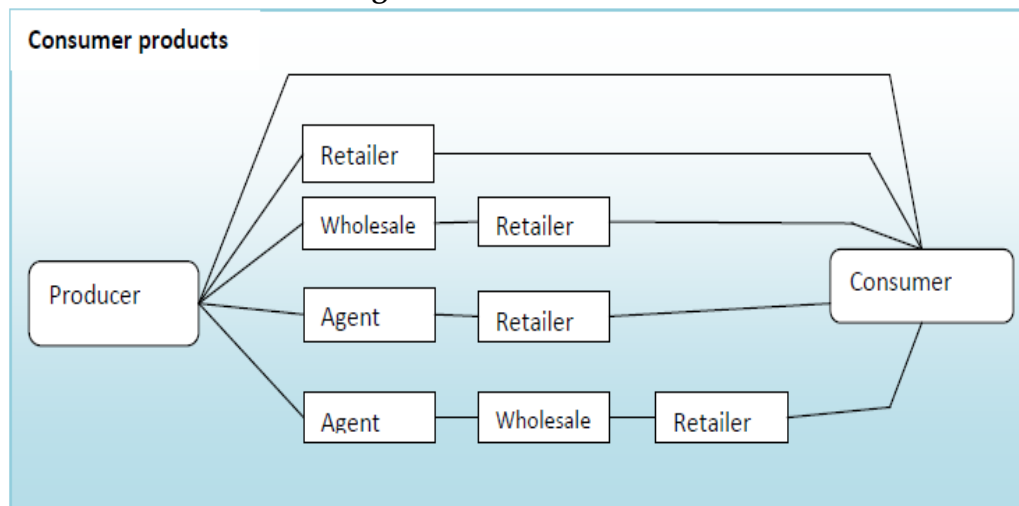
This research was also grounded on Stern and Reve (1980) channel theory. According to the theorists, this theory is divided into two orientations: economic and behavioural approaches. First analyses the efficiency of the channel, studying issues like channel design and structure. The latter is sociologically oriented, focusing on power, cooperation, satisfaction and conflict in channels. The structure of channels requires a set of strategic decisions: The first decision determines the appropriate intermediary type, for instance wholesaler, retailer, franchise, broker, direct sales force. The second is distribution intensity that is, how many intermediaries to include and number of levels of a channel structure. The second strategic decision in a channel, distribution intensity, is a key element of the channel strategy (Fulmer, Gerhart, & Scott, 2003), and often dictate all the channel structure influencing the type of intermediary, the coverage of the market,

and the kind of distribution (direct or indirect). A variety of approaches has been taken to distribution channel, but distribution structure and intensity has received little attention in academic research (Iyanda, 1991; Rogers, 1983; Rosemary-Stewart, 1961); Marketing researchers are more concerned about management issues like power, conflict, satisfaction and performance (Gaski, 1996). Stern and El-Ansary (1982) affirmed that a channel is not easily selected; there are some constraints such as the availability of good middlemen, traditional channel patterns, product characteristics, company finances, competitive strategies, and customer dispersion question. Mcvey (1960) expressed the same idea when he stated that channels networks were not necessarily designed under the control of one type of organisation and that they faced limited choices in designing the channels for their products. Mcvey added that choice of a channel is not open to any firm unless it has considerable freedom of action in matters of marketing policy. According to this approach, the producer has a variety of limitations, including limited choice of types of middlemen, customers and locations of trading areas.

### 3. Literature Review

According to Czinkota and Ronkainen, the general distribution channel is described in Figure 1.

**Figure 1:** Channel structure



**Source:** Czinkota and Ronkainen (2001).

Figure 1 shows the channel structure from producer to the final consumer. For the desire of each market to be fair, a similar distribution plan is not likely to be lucrative for each company. Therefore, a question comes, which is the best distribution strategy to utilise? According to Czinkota and Ronkaine (2001), it could not be noticeable that superior limits in a careful distribution location would balance for low sales unit. The size of the market and their geographic distribution, income, habits and their reaction to different selling methods are all related factors that influence the channels structure

design. Together with customer, characteristics are the features of the product such as degree of standardization perish ability, bulk; service requirement and price also are factors that drive the channel type (Keegan & Green, 2010). The type of channel can be direct from the producer – to – customer or elaborate, multilevel channels employing many intermediaries such as opening their own sale offices, entering into cooperative arrangements with other exporters, using a local distributor, piggybacking. Trading straight from manufacturer to the consumer mostly through the mail order, various types of door to door selling, through the internet or through producer owned retail channels is the first alternative in the channel. Internet exporting and the related form of media are changing the dominant of distribution landscape, successful cases using internet channel can be listed as E-Bay and Amazon. Door-to-door selling using direct sale forces are popular in mid 1990s, which is quite effective for low cost, mass-market non-durable products and certain services like make ups (Amway or Avon) or indemnity. Manufacturer-owned store or independent franchise store, company opened a worldwide chain of company-owned and company – operated to sell their products or services (Keegan & Green, 2010).

In order to have a successful production, the firm need to be in a position to manufacture products of higher quality and ensure that they reach their customers on time, in right state and at minimum cost. So that the organisation can attain this, it calls for effective and efficient logistics distribution structure to be available. Kahia and Iravo (2014) alluded that regardless of more strength by manufacturers to certify that the distribution methods are effective, majority of clients do face deliveries delay. This implies that the performance of distribution logistics operates below majority of consumers expectations among many firms in the country. The capacity of the supplier to stick to pre-definite schedule of delivery appears to be a significant factor for choice in the current global environment. Hence, Mwikali and Kavale (2012) suggest that suppliers who stick to their guarantees are profitable and easier to associate with. It is the period between when order was made and placed for the products and real conveyance. Scholars argue that when the lead – time is shorter, then the supplier appears to be a better one. Each firm that is purchasing is always contented when the lead – time is short. Lead-time that is long creates the feeling that certain suppliers are not efficient enough or they do have many customers they are contracted to hence deliveries delay (Beamon, 1999).

The location of the supplier and its physical and social status should be analysed properly before selection of global partner. The following factors need to be checked before supplier selection due to the long-term association as it may avert problems in product supply. They consist of: nature of natural calamities, location of the factor and the origin of the supplier (country) (Mwikali & Kavale, 2012). Establishment of county depots helps to ensure that goods are near to customers hence ensures that short notice orders are delivered on time where possible. Another distribution structure pertains to route plan which involves company making decision on when to plan for dispatches and vehicle size to be used (capacity). When selecting routes, the one that is settled could

influence mostly on the capacity to delivering products on time as vehicles could avoid congestions related to traffics or utilise the routes available which are shortest. Kahia and Iravo (2014) notes that the selected route could also have influence on delivery cost.

In Nigeria, Obaji's (2011) study investigated the effects of channels of distribution in selected manufacturing companies as it affects sales of its product. The quantitative research method was the instrument used to collect data for the study. The respondents for the study were marketing staff, distributors and customers (300 in number). The instruments returned were 200. Analysis of data was aided through SPSS and t-test used to look for existence of significant difference on the observed variables and the essential constructs. Result showed that channel members involvement influenced product sales and customers preferred to purchase from agents than channels developed by the manufacturer. Obaji suggested that members of the channel need to determine various key decisions like consumers service, delivery, and maintain inventory control and the company should give adequate promotional support to the intermediaries, improve on delivery terms and evaluate channel members regularly. A research conducted among cement factories in Nigeria was done by Aniki, Mbohwa and Akinlabi (2014). The focus was establishing how supply and logistic chains were executed; challenges experienced and look for probable solutions. Results showed that majority of cement firms routed their logistical system through road – link system for product delivery to their consumers. Moreover, study showed that seventy three percent of respondents preferred to continue using the above-mentioned logistics supply systems. They did not prefer railway system because it was very poor as it was not well maintained, and some railway infrastructure were obsolete hence not an alternative option.

Kahia and Iravo's (2014) research was aimed at identifying the various factors that affect the performance of distribution logistics at Bata Shoe Company Limited located in Limuru Kenya. Questionnaire was used to collect data from employees working in the shoe company. According to the research findings, it is clear that the customer, the product, technology and distribution structure are all factors that affect the performance of distribution logistics. The research also determined that customers' location, ordered quantities, customer requirements and the number of customers are all customer aspects that affect logistics distribution function performance. the type of transport mode being used and existence of county and regional depots appeared to be factors that influenced distribution logistics performance. With regard to on-route planning, the respondents were undecided on their contribution to DL performance. The study by Kahia and Iravo was done at Bata Shoe Company while this study focused on cement manufacturing firms.

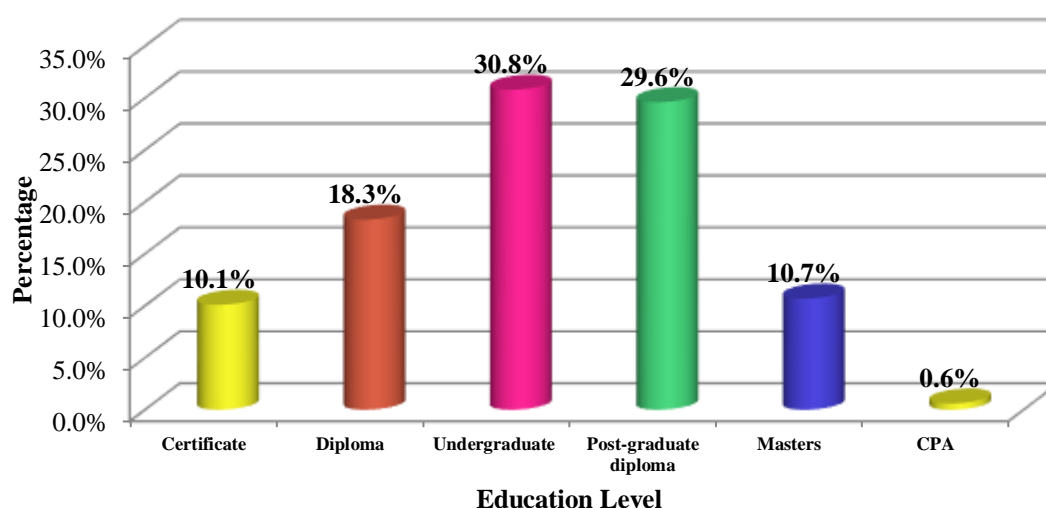
#### **4. Materials and Methods**

The study is grounded on correlation research design strategy looking at the relationship and association that existed between distribution channel structure strategy and performance of cement manufacturing firms in the country. The study was conducted in

seven manufacturing firms in Kenya. The target population comprised of employees working in the following departments and areas: distributors, customers, sales and departmental managers in the 7 cement manufacturing firms. The targeted respondents were; 140 cement distributors, 140 cement customers, 35 cement firms finance directors, 140 sales and distribution department employees and 14 heads of department. Stratified sampling procedure was used due to the heterogeneous nature of the study population. The sample size for this study was 216. Primary data was collected using researcher - designed questionnaires. Validity and reliability tests were performed before the instrument were issued to respondents. Data collected was analysed using descriptive; frequencies, percentages, means, standard deviation and inferential statistics; correlation analysis. SPSS aided in data coding, entry and analysis. The results of the analysis are presented in the results and discussion section.

## 5. Results and Discussions

The respondents were also asked to indicate their highest level of education. Their responses are illustrated in Figure 2.



**Figure 2:** Respondents' Level of Education

According to Figure 2, 17 (10.1%) of respondents had certificate level of education, 31 (18.3%) had diploma level, 52 (30.8%) had undergraduate degree, 50 (29.6%) had postgraduate diploma, 18 (10.7%) had masters level and 1 (0.6%) possessed Certified Public Accountant (CPA) professional qualifications. The result shows that most respondents working with cement manufacturing companies have tertiary level of education and therefore capable of understanding channel strategies influence on performance of their organisation.

The research question for this study sought to determine how channel structure strategy influenced performance of cement manufacturing firms in Kenya. Therefore, respondents were request to indicate their opinion on the degree which channel structure

influenced performance of cement firms through the following scale; Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4) and Strongly Agree (5). The results are given in Table 1.

**Table 1:** Channel Structure and Cement Manufacturing Firms Performance

Channel cost strategy	SD	D	U	A	SA	Mean	SD
The company has recognized the need for channel structure that addresses their distribution issues and delivers the product to their end consumer more efficiently	5 (3.0%)	6 (3.6%)	13 (7.7%)	52 (30.8%)	63 (55.0%)	4.3136	.97094
The company has set distribution objectives that are well coordinated with other marketing and firm objectives	7 (4.1%)	11 (6.5%)	14 (8.3%)	67 (39.6%)	70 (41.4%)	4.0769	1.06346
The company has explicitly specified the distribution tasks to be risk taking and financing	1 (0.6%)	5 (3.0%)	18 (10.7%)	62 (36.7%)	83 (49.1%)	4.3077	.82375
The company has evaluated the merits and demerits of the possible alternative channel structures and chosen the most favourable one and this has improved firm performance.	1 (0.6%)	11 (6.5%)	19 (11.2%)	65 (38.5%)	73 (43.2%)	4.1716	.91295
The current channel structure used by the company is the most suitable and effective considering market, product, company, intermediary, environmental and behavioural variables	2 (1.2%)	9 (5.3%)	18 (10.7%)	62 (36.7%)	78 (46.2%)	4.2130	.92044
The company has chosen the "best" channel structure consistent with firm's performance goal of gaining market share, maximizing profits and improving customer satisfaction.	0 (0.0%)	11 (6.5%)	17 (10.1%)	74 (43.8%)	67 (39.6%)	4.1657	.85691
<b>Valid N (Listwise)</b>						<b>4.2081</b>	<b>0.92474</b>

**Key:** SD-Strongly Disagree, D-Disagree, U-Undecided, A-Agree and SA-Strongly Agree



Research results shows that most 63 (55.0%) of respondents strongly agreed that their company had recognised the need for channel structure which addresses their distribution issues as it results to delivery of company products. Most respondents appeared to agree with the statement ( $M=4.31$  and  $SD=0.97$ ). The result implies that channel structure has been installed to address distribution issues and delivery products to clients quickly and efficiently. This minimises wastage in terms of hours and costs associated with delays. Research finding also showed that 70 (41.4%) of respondents strongly agreed and 67 (39.6%) agreed that their companies had set distribution objectives which were connected with marketing and organisational objectives. Most respondents agreed ( $M=4.07$ ) with few appearing to have a different view through standard deviation values ( $SD=1.06$ ). The finding therefore implies that most cement companies have aligned channel distribution objectives with the organization ones to ensure effective coordination and reduce incidents of delays and misunderstandings during distribution process.

Research results also showed that close to half 83 (49.1%) of respondents strongly agreed that their company has explicitly specified the distribution tasks to be performed by channel members. Descriptive statistics shows that most respondents agreed ( $M=4.30$  and  $SD=0.82$ ). The result implies that tasks and instructions are clear to all members in the distribution channel network to avoid class through various responsibilities assigned to them. When asked as to whether their company had evaluated the advantages and disadvantages of the possible alternative channel structure by choosing the most favourable ones, 1 (0.6%) strongly disagree, 11 (6.5%) disagreed, 19 (11.2%) were undecided, 65 (38.5%) agreed and 73 (43.2%) strongly agreed. This implies that majority of companies analyses and evaluates the merits and demerits of channel structure before settling on a favourable one which would improve their organisation performance on occasional basis ( $M=4.17$  and  $SD=0.91$ ). This implies that keen interest is done before choosing favourable channel structure to use in distribution.

The study also found out that 78 (46.2%) strongly agreed while 62 (36.7%) agreed that their current channel structure was the most suitable and effective in the distribution procedures. This implies that majority of cement companies settle on the most ( $M=4.21$  and  $SD=0.92$ ) suitable and effective channel structure by analysing markets, products, companies, intermediaries, environmental and behavioural factors. Research result also showed that 74 (43.8%) of respondents agreed and 67 (39.6%) strongly agreed that their company uses best channel structure which is in line with their firm goal of maximisation of profits, improvement of customer satisfaction and gaining of market share. This implies that most companies consider going for the best distribution channel structure that is consistent with the organisation goals. Average statistics reveal that most respondents agreed ( $M=4.20$  and  $SD=0.92$ ) that channel structure influence performance of manufacturing firms in Kenya. The findings agree with Ntale (2016) research majority of respondents agreed that the channel design was good in determining performance improvement.

Further, a correlation analysis was computed between channel distribution structure strategy and performance of manufacturing firms in Kenya. Table 2 shows the results.

**Table 2:** Correlations

		Organisation performance
Channel distribution structure	Pearson Correlation	.758**
	Sig. (2-tailed)	.000
	N	169

\*\*. Correlation is significant at the 0.01 level (2-tailed).

**Source:** Research Data, (2018).

The correlation values show that there exists significant positive relationship which is strong ( $r=0.758$  and  $p=0.001$ ) between channel distribution structure strategy and performance of cement manufacturing firms in Kenya. the result implies that an increase and improvement in channel distribution structure strategies would result o improved performance by cement manufacturing firms in Kenya. The study findings agree with Ntale (2016) research in Uganda that found Monitor Publications Limited channel design influenced sales performance with a correlation value of  $R=0.33$ . This means that cement manufacturing firms have to ensure that their distribution structure performs to the best for enhanced performance.

## 6. Conclusions and Recommendations

The paper has discovered that most cement manufacturing firms in Kenya always chose the best channel structure that is consistent with firms' performance. Most companies also ensured that their channel structure was in a position to address distribution issues that would lead to delivery of company products to their end consumers more efficiently. The paper concludes that there existed significant positive relationship between distribution channel structure and performance of cement manufacturing firms in Kenya. This implied that regular evaluation of merits and demerits of alternative channel structures by choosing the favourable ones improved performance of cement companies significantly. To improve on channel structure, all cement companies need to ensure that distribution objectives of their organization resonates with marketing and distribution objectives. This will ensure success of distribution process hence improved performance of the cement manufacturing firms in Kenya.

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